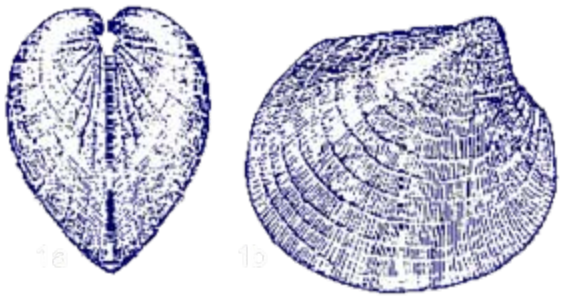
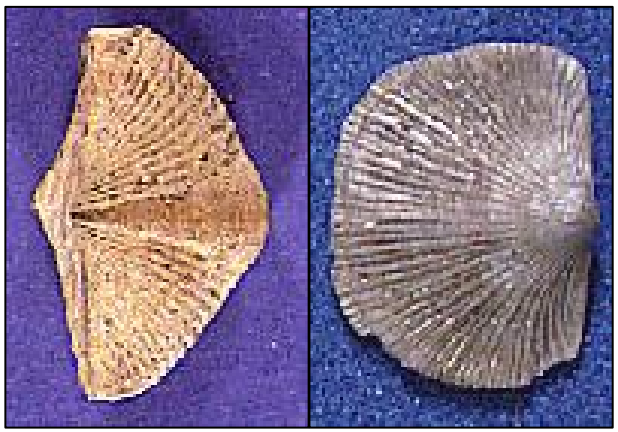
Permian Marine Fossil Guide

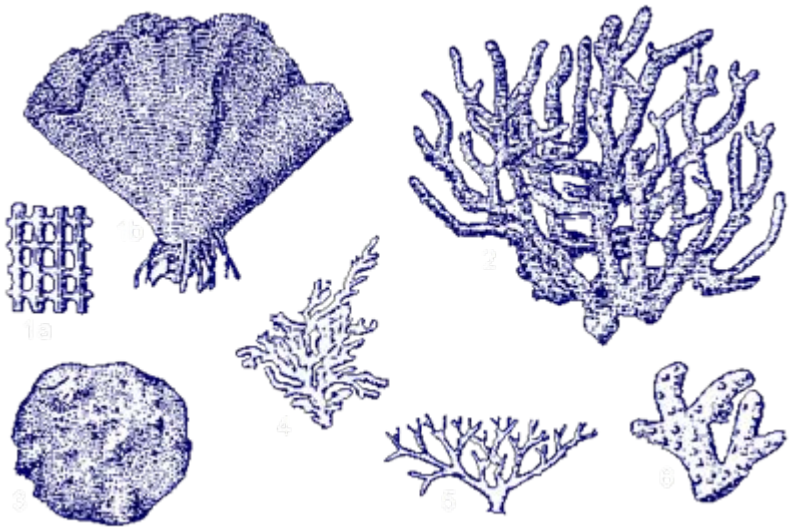
Algae: a collection of plant species that thrive in wet conditions; many are unicellular organisms (common types found in the Capitan Formation during the Permian were: *Tubiphytes* and *Archaeolithoporella*).



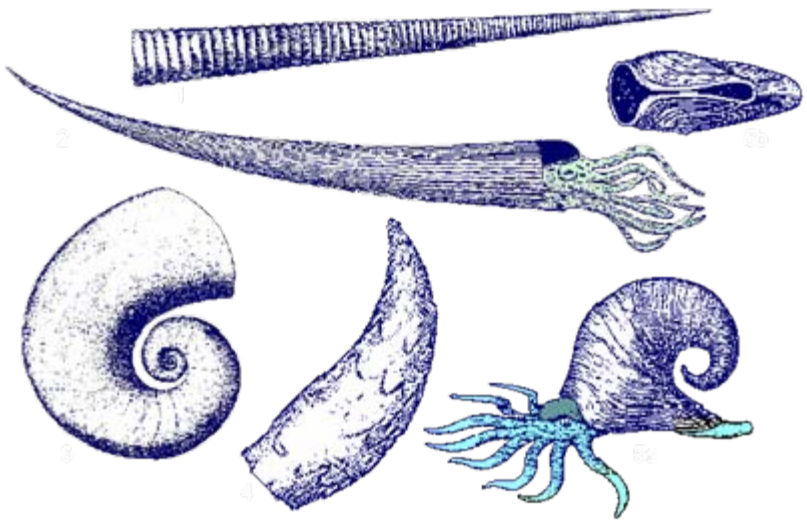
Bivalves: an animal (as a clam) with a 2-valved shell



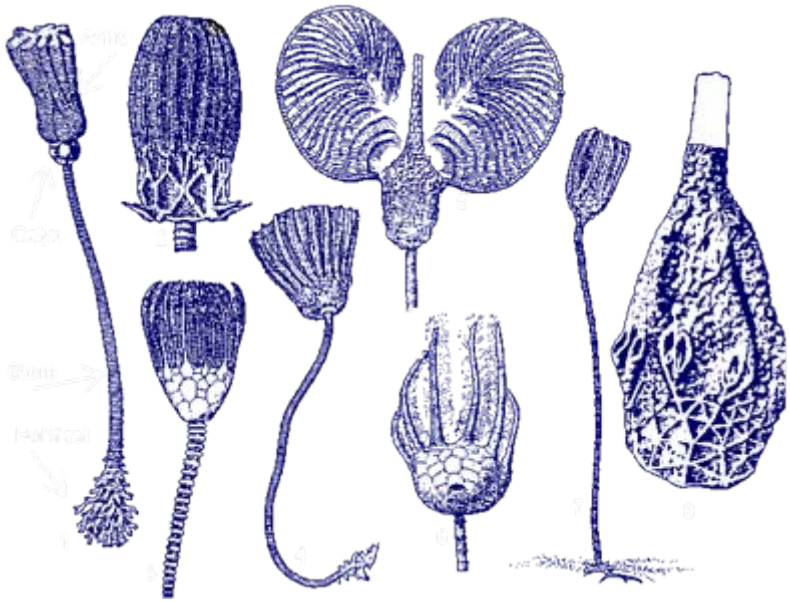
Brachiopods: an invertebrate animal with a pair of protective shells, a stalk anchoring it to the floor, and tiny tentacles to catch food. They came in all shapes and sizes before they all nearly became extinct at the end of the Permian Period.



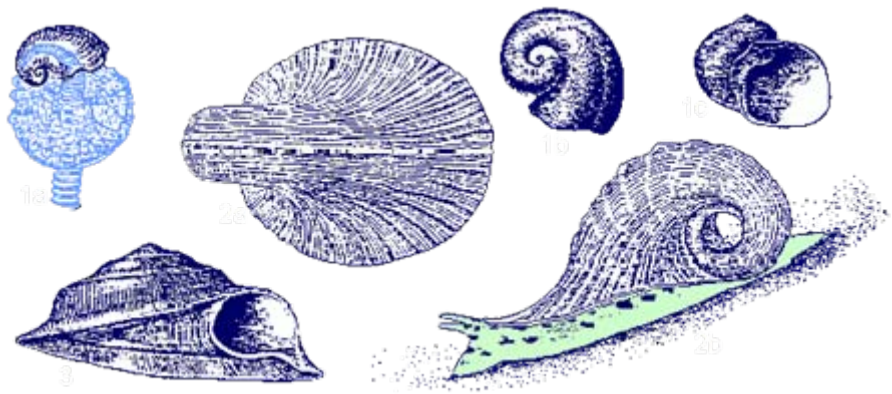
Bryozoan: a phylum of animals, often called "moss animals," that had a fan-like or boxwork-like frame built from colonies of individual organisms.



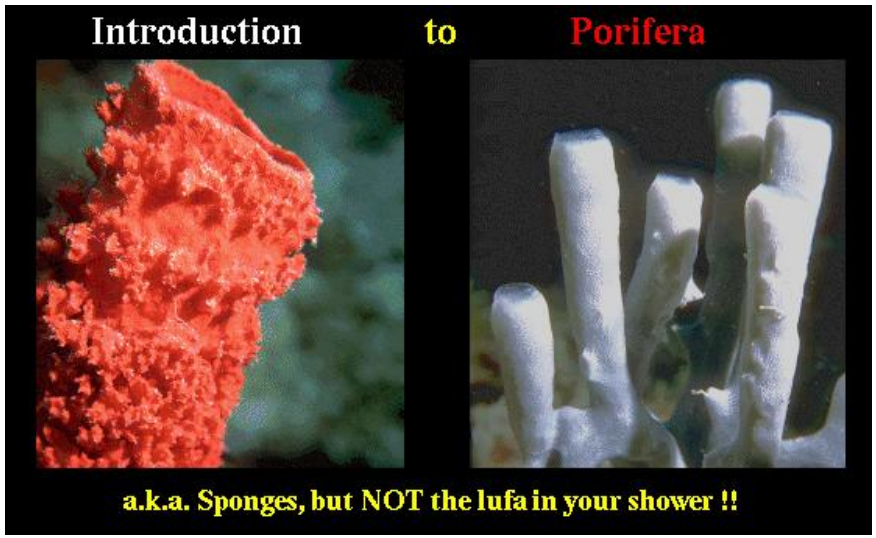
Cephalopods: an organized group of mollusks in the Class Cephalopoda that are free-swimming aggressive carnivores with tentacles to capture prey and a siphon to move using jet-propulsion. This Class includes Nautaloids and Ammonites.



Crinoids: part of the Class Crinoidea in the phylum Echinoidermata, these are sea-lily animals with segmented stalks to root them to the ground and a flower-like head with tentacles to catch prey. The stalks are most commonly found fossilized whole with the segments still together or with the segments separated as little disks.

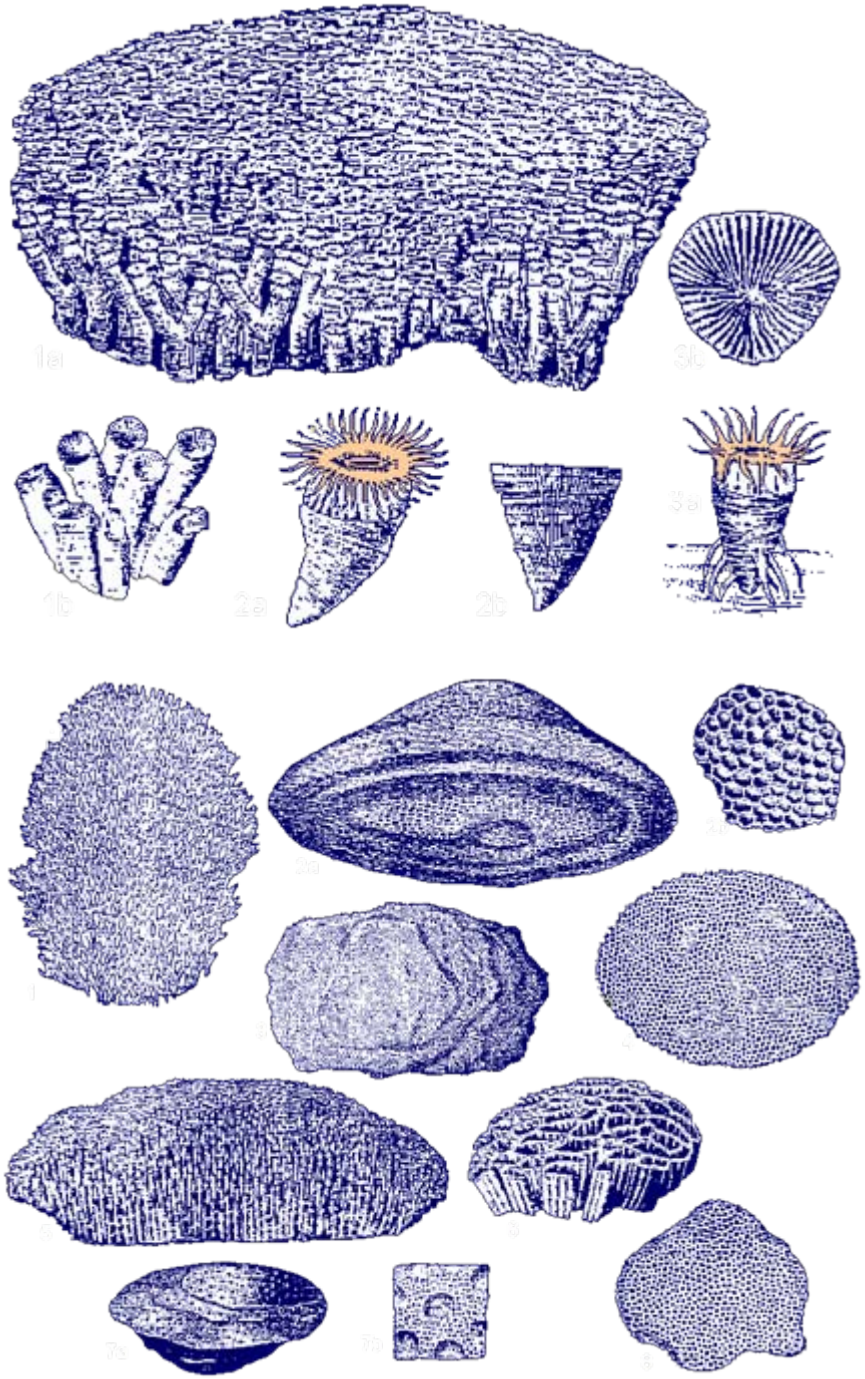


Gastropods: any of a large class (Gastropoda) of mollusks (as snails and slugs) usually with a soft unsegmented body enclosed in a calcareous shell.

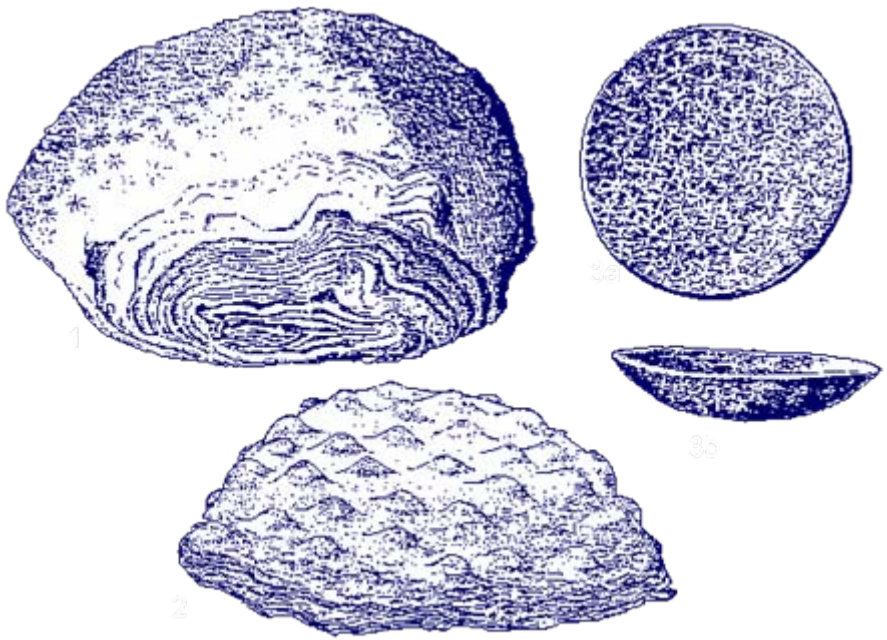


Sponges: the common name for an animal in the Phylum Porifera that primarily resides in shallow, temperate marine waters in colonies. Permian sponges, such as *Girvanella*, *Mizza*, and *Solenopora*, are the most abundant organisms visible in the rocks; over 4,500 species are known today.

Trilobites: any of numerous extinct Paleozoic marine arthropods (group Trilobita) having the segments of the body divided by furrows on the dorsal surface into three lobes



Corals: the calcareous or horny skeletal deposit produced by marine invertebrates. Pictured are Rugose Corals or "Horn Coral" (top) and Tabulate Coral (bottom).



Stromatolites: a laminated sedimentary fossil formed from layers of colonies of blue-green algae.